DT15 Rec'd PCT/PTO 1 2 JUL 2004

COMMERCE PATENT AND TRADEMARK OFFICE TTORNEY'S DOCKET NUMBER FORM PTO-1390 (REV 01-2003) TRANSMITTAL LETTER TO THE UNITED STATES 180577-00144 U.S. APPLICATION NO. (If known, see 37 CFR 1.5) DESIGNATED/ELECTED OFFICE (DO/EO/US) LO/501 **CONCERNING A FILING UNDER 35 U.S.C. 371** INTERNATIONAL APPLICATION NO. INTERNATIONAL FILING DATE PRIORITY DATE CLAIMED PCT/CA03/00016 12 January 2002 10 January 2003 TITLE OF INVENTION HEAT EXCHANGE TUBULAR REACTOR WITH HEAT PIPE APPLICANT(S) FOR DO/EO/US Vinh N. Le Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: This is a FIRST submission of items concerning a filing under 35 U.S.C. 371. This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371. 2. 3. 冈 This is an express request to begin national examination procedures (35 U.S.C. 371 9(f)). The submission must include items (5), (6), (9) and (21) indicated below. The US has been elected (Article 31). 冈 A copy of the International Application as filed (35 U.S.C. 371 (c)(2)) 5. is attached hereto (required only if not communicated by the International Bureau). a. has been communicated by the International Bureau. is not required, as the application was filed in the United States Receiving Office (RO/US). An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). 6. is attached hereto. a. has been previously submitted under 35 U.S.C. 154(d)(4). b. Amendments to the claims of the International Application under under PCT Article 19 (35 U.S.C. 371(c)(3)) M are attached hereto (required only if not communicated by the International Bureau). b. have been communicated by the International Bureau. have not been made; however, the time limit for making such amendments has NOT expired. have not been made and will not be made. An English translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). 8. \boxtimes 9. An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)) (NOT EXECUTED). An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 10. (35 U.S.C. 371 (c)(5)). Items 11. to 20 below concern document(s) or information included: 11. \boxtimes An Information Disclosure Statement under 37 CFR 1.97 and 1.98. An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 12. \boxtimes 13. A preliminary amendment. An Application Data Sheet under 37 CFR 1.76. 14. 15. A substitute specification. A power of attorney and/or change of address letter. 16. A computer-readable form of the sequesnce listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825. 17. П \boxtimes A second copy of the published international application under 35 U.S.C. 154(d)(4). 18. 19. A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4). Other items or information: 20. **EXPRESS MAIL MAILING LABEL NUMBER EV 216143807US** DATE OF DEPOSIT July 12, 2004 I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to: Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450. (Typed name of person mailing paper or fee) (Signature of person mailing paper or fee)

U.S. APPLICATION NO. (INTERNATIONAL APP		ATTORNEYS'S DOCKET N 180577-00144	IUMBER
. 10/501 388 PCT/CA03/00016 21. ☑ The following fees are submitted			CALCULATIONS	PTO USE ONLY	
BASIC NATIONAL FEE (37 CFR 1.492 (a) (1) – (5)):				- CABCODATIONS	
Neither international preliminary examination fee (37 CFR 1.482)					
nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO					
and International Search Report not prepared by the EPO or JPO\$1080.00					
International preliminary examination fee (37 CFR 1.482) not paid to				920.00	
USPTO but International Search Report prepared by the EPO or JPO\$920.00					
International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO\$770.00					
International preliminary examination fee (37 CFR 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(1)-(4)\$730.00					
International preliminary examination fee (37 CFR 1.482) paid to USPTO and all claims satisfied provisions of PCT Article 33 (1)-(4)\$100.00					
ENTER APPROPRIATE BASIC FEE AMOUNT =				\$	
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months					
	med priority date (37 CF			S	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	s	
Total Claims	, , , , , , , , , , , , , , , , , , ,	0	x \$18.00	s	
Independent Claims	<u> </u>	0	x \$86.00	S	
MULTIPLE DEPENDENT CLAIMS(S) (if applicable) + \$290.00				\$	
TOTAL OF ABOVE CALCULATIONS =				\$920.00	
Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by ½.				s	
SUBTOTAL =				s	
Processing fee of \$130.00 for furnishing the English translation later than 30 months					
from the earliest claimed priority date (37 CFR 1.492(f)). +				S	
TOTAL NATIONAL FEE =				s	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +				s	
TOTAL FEES ENCLOSED =				\$ 920.00	
				Amount to be	
				refunded:	s
charged:					
a. A check in the amount of \$ 920.00 to cover the above fees is enclosed.					
b. Please charge my Deposit Account No. 50-0540 in the amount of \$ to cover the above fees. A duplicate copy of this sheet is enclosed.					
c. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No.50-0540. A duplicate copy of this sheet is enclosed.					
d. Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.					
NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.					
SEND ALL CORRESPONDENCE TO:				SIGNATURE	
CUSTOMER NO. 31013					•
WILLIAM J. SPATZ				William J. Spatz NAME	
1	FTALIS & FRANKEL LL				
919 Third Avenue New York, NY 10022				30,108 REGISTRATION NUMBER	
	.2	KEGISTKA HON NUMBEK			
Date: July 12, 2004					

Express No. <u>EV216143807US</u>
Date: <u>July 12, 2004</u>

22313-1450.

EXPRESS MAIL

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an

envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS

Le, Vinh N.

SERIAL NO.

To be assigned

FILED

FOR

HEAT EXCHANGE

Herewith on July 12, 2004

TUBULAR REACTOR WITH

HEAT PIPE

GROUP ART UNIT:

To be assigned

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Kindly file the annexed papers indicated below:

- Transmittal Letter to the U.S. Designated/Elected Office Concerning a Filing Under 35 U.S.C. 371
- Preliminary Amendment
- Declaration/Power of Attorney of Inventor (unsigned)
- Information Disclosure Statement
- PTO 1449 and References
- Published International Application WO 03/057358
- Check for \$920.00
- Return Receipt Postcard

Respectfully submitted,

KRAMER LEVIN NAFTALIS & FRANKEL LLP Attorney for Applicant

Dated: July 12, 2004

By:

William J. Spatz

Registration No. 30,108

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